THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 34

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

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Ex parte RICHARD MILNER

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Appeal No. 95-3875
Application 08/049,613[1]

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ON BRIEF

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Before WEIFFENBACH, PAK and OWENS, *Administrative Patent Judges*.

OWENS, *Administrative Patent Judge.*

DECISION ON APPEAL

This is an appeal from the examiner's final rejection of claims 1, 2, 4-7, 18 and 20-22, which are all of the claims remaining in the application.

[1] Application for patent filed April 16, 1993. According to the appellant, the application is a continuation of Application 07/659,395, filed February 21, 1991, abandoned, which is a national stage application under 35 U.S.C. § 371 of PCT/GB89/00978, filed August 23, 1989.

THE INVENTION

Appellant claims a method for making an antimicrobial glove wherein, after a natural rubber latex has been formed into a glove but before the latex is cured, the latex is dipped into a solution of an antimicrobial agent such that an effective amount of the antimicrobial agent is incorporated throughout the latex. Claim 1 is illustrative and reads as follows:

1. A method for the manufacture of an antimicrobial rubber article formed from a natural rubber latex which method comprises incorporating an effective amount of an antimicrobial agent, throughout the natural rubber latex after the article has been shaped or formed but before the article has been cured by dipping a glove shape of uncured natural rubber latex into a solution of an antimicrobial agent.

THE REFERENCES

Stephenson	3,987,797	Oct. 26, 1976
Mochizuki et al. (Mochizuki)	4,675,347	Jun. 23, 1987
Stockum	4,853,978	Aug. 8, 1989

THE REJECTION

Claims 1, 2, 4-7, 18 and 20-22 stand rejected under 35 U.S.C. § 103 as being unpatentable over Stockum in view of Stephenson and Mochizuki.

OPINION

We have carefully considered all of the arguments advanced by appellant and the examiner and agree with appellant that the aforementioned rejection is not well founded. Accordingly, this rejection will be reversed.

Stockum discloses a method for making an antimicrobial rubber medical glove

wherein after the glove has been formed from a natural rubber latex, but before the latex is cured, an antimicrobial layer is applied to the inner surface of the glove (col. 1, lines 44-51; col. 5, lines 27-34).[2] The antimicrobial layer is a low coefficient of friction elastomeric layer which includes an antimicrobial agent (col. 4, lines 7-27; col. 5, lines 27-34).[3] Stockum states that the antimicrobial agent is expensive and that because the inner layer is a minor portion of the glove, the glove is more economical than it would be if the antimicrobial agent were incorporated in the entire glove (col. 1, line 66 - col. 2, line 2).

Stephenson discloses coating any of a variety of surgical aids with an ionically bonded block elastomeric copolymer of a polyquaternary polyurethane and a polyanionic polymer such as heparin (col. 1, lines 45-51; col. 2, lines 11-13). A surgical aid so coated is receptive to treatment with an anionic or cationic antimicrobial compound, and the antimicrobial compound can be applied by immersing the surgical aid in an aqueous solution of the compound and then either drying the surgical aid or using it without the drying step (col. 1, lines 51-52; col. 6, lines 27-31). The antimicrobial compound is retained by the elastomeric heparin polymer and is slowly

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[2] Optionally, the antimicrobial layer can be applied to both the inside and outside surfaces of the glove (col. 2, lines 3-6).

[3] Alternatively, the antimicrobial agent can be included in a cornstarch powder layer, but such a powder layer is applied after the glove has been cured (col. 2, lines 56-59; col. 2, line 62 - col. 3, line 2).

released (col. 5, lines 15-18; col. 6, lines 47-50).

The portion of Mochizuki relied upon by the examiner (answer, page 4) teaches that mixing cationic antimicrobial agents with conventional natural rubber latices causes the natural rubber latices to either gel instantaneously or have an unduly short pot life (col. 2, lines 44-51). Mochizuki discloses that antimicrobial latex compositions having sufficiently long pot life to be molded into products including medical devices are produced by incorporating a cationic antimicrobial agent into a cationic natural or synthetic rubber latex (col. 3, lines 20-42).

The examiner argues that substitution of Stephenson's aqueous antimicrobial solution for Stockum's polymeric solution would have been obvious to one of ordinary skill in the art who was not concerned with expense and who desired an even distribution of antimicrobial agent throughout a surgical glove (answer, pages 3-4). This argument is not persuasive because the examiner has not pointed out where Stephenson discloses that his aqueous solution distributes throughout the surgical aid. Stephenson states that his antimicrobial composition is retained by the elastomeric heparin polymer layer on the surface of the surgical aid (col. 6, lines 27-28 and 47-50), which indicates that the antimicrobial composition does not disperse throughout the surgical aid.

The examiner argues that permeation of antimicrobials is a direct result of dipping an uncured glove into an aqueous antimicrobial solution (answer, page 5).

This argument is not well taken because in the reference relied upon by the examiner for a teaching of contacting an article with an aqueous solution, i.e., Stephenson, the aqueous antimicrobial solution contacts a polymer layer on the surface of the article and is incorporated into that layer (col. 6, lines 28-29 and 48-50). We do not find in the references relied upon by the examiner a fair suggestion to dip an article which does not have such a polymer layer into an aqueous antimicrobial solution.

The examiner argues that Stockum desires to eliminate permeation by using a polymeric coating so that the antimicrobials are not incorporated throughout the entire glove (answer, pages 6-7). The examiner, however, does not point to any recognition by either Stockum or Stephenson that an aqueous antimicrobial solution would permeate through an uncured natural rubber latex article. The disclosure by Stockum regarding incorporating antimicrobials throughout the entire glove does not mention how the antimicrobials are incorporated. The examiner has provided no evidence that one of ordinary skill in the art would have considered an effective method for such incorporation to be permeation after the glove is formed but before it is cured. The antimicrobials could merely be mixed with the rubber latex before the glove is formed.

For the above reasons, we conclude that the examiner has not carried his burden of establishing a *prima facie* case of obviousness of appellant's claimed invention.

DECISION

The rejection of claims 1, 2, 4-7, 18 and 20-22 under 35 U.S.C. § 103 as being unpatentable over Stockum in view of Stephenson and Mochizuki is reversed.

REVERSED

CAMERON WEIFFENBACH Administrative Patent Judge	)
	) BOARD OF PATENT
CHUNG K. PAK Administrative Patent Judge	) APPEALS AND
	) INTERFERENCES
TERRY J. OWENS Administrative Patent Judge	)

Simon B. Anolick, Esq.
Gardner, Carton & Douglas
321 North Clark Street
Suite 3400
Chicago, IL 60610